

Ioannina, 09/10/2015

Dear Editor,

Enclosed please find the final revised version of **acp-2014-374** paper entitled “**The regime of aerosol asymmetry parameter over Europe, Mediterranean and Middle East based on MODIS satellite data: evaluation against surface AERONET measurements**”. We have addressed the editorial comments by Reviewer 3 (Report #2) and modified our paper accordingly.

I also send you point-by-point responses to the comments and the manuscript in tracked changes format.

We would like to thank you very much for handling our submission.

Yours sincerely,

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Response to Reviewer 3 (Report #2)

We would like to thank Dr Kaskaoutis for his helpful last comments, which we took into account in the final revised manuscript, as explained below.

“In the abstract, authors should note that the MODIS retrievals and total analysis corresponds to the oceanic areas only comprising the mentioned regions.”

This is clarified now in the abstract, line 21.

“Lines 120-121. This sentence may be omitted as redundant of the above (lines 110-112).”

Done, lines 123-125.

“Lines 125-129. This paragraph may be omitted, since the detailed description is given in the very next section. In case you want to maintain it, I suggest shortening it”

We decided to keep this paragraph, as introductory to the following two sub-sections, but shortened it as suggested (lines 126-128).

“Line 151. Is this the 870 nm wavelength or the 860 as referred in line 164? Please, check once again and correct. It should be also nice to add one sentence explaining why you finally choose these three wavelengths for τ_{aer} retrievals, leaving out the 550 and infrared ones.”

We thank the Reviewer for this comment. The correct MODIS wavelength is 860 nm (correction applied in line 150 and throughout the text). The selection of MODIS τ_{aer} wavelengths was based on the criterion of overlapping with the available AERONET ones, and also a relatively equal distance between them. This has been stated in the text, lines 151-153.

“Line 158. Correct as “fine-mode”

Done, line 159.

“Lines 219-224. These lines may be omitted since the first sentence constitutes a repetition of discussions given in section 2 and the rest of the text refers to τ_{aer} and AOD diurnal variations, which are not presented here and, furthermore, they have not strong association between them. I think that discussing the AOD diurnal variation in such a brief way it is not of any advantage for the paper.”

We agree with the Reviewer and removed the relevant part of the text (see end of first paragraph of sect. 3.1).

“Lines 294-296. The lower g values in spring and summer cannot be associated with the enhanced presence of dust. Dust, as stated in the rest of the manuscript tends to increase the g values. Please, correct...”

Indeed, there was a mistake at this point. We have modified accordingly the text, lines 290-293.

“Line 385. One of the terms "greater" or "larger" should be removed.”

“larger” was removed, line 381.

“Line 441. Delete "retrieval".”

Done, line 437.

“Lines 468-469. This sentence needs revision. The syntax "... data for all but winter months," seems rather problematic.”

The relevant text was re-written, lines 463-466.

“Lines 516-520. This has already been discussed in detail in section 2.2. Authors should shorten this part avoiding repetitions.”

The relevant paragraph has been shortened, see first paragraph of sect. 4

“Line 604. Delete the double dot here”

Done, line 597.